

## **5.0 OTHER REQUIRED CEQA/NEPA SECTIONS**

### **5.1 INTRODUCTION TO ADDITIONAL CEQA/NEPA REQUIREMENTS DISCUSSED IN THIS SECTION**

As per the CEQA, Section 15126.2 (b), Section 5.2, Significant Environmental Effects of Proposed Project that Cannot be Mitigated to Less than Significant, presents those significant environmental impacts that cannot be avoided in the granting of a new lease by the CSLC to the Shell Terminal. Those impacts would remain significant and unavoidable (Class I), even after incorporation of available and feasible mitigation measures.

Per the CEQA (Section 15126.2(c)), Section 5.3, Irreversible/Irretrievable Commitment of Resources, presents the irreversible changes related to the use of, or long-term commitment of, nonrenewable resources. Irreversible changes represent long-term environmental damages that could result from the proposed Project. Of the impacts presented in Section 5.2, Significant Environmental Effects of Proposed Project that Cannot be Mitigated to Less than Significant, even the impacts of oil spills over a long enough time period are reversible. However, if a large spill would cause enough water quality or biological damage so as to result in the elimination of a species, an irreversible impact would result.

As per the CEQA (Section 15126.2(d)), Section 5.4, Growth Inducing Impacts of the Proposed Project, discusses the ways in which the proposed Project could foster economic or population growth, or induce additional housing, either directly or indirectly in the surrounding environment.

### **5.2 SIGNIFICANT ENVIRONMENTAL EFFECTS OF PROPOSED PROJECT THAT CANNOT BE MITIGATED TO LESS THAN SIGNIFICANT**

Significant environmental impacts that cannot be avoided in the granting of a new lease by the CSLC to the Shell Terminal are presented below. These impacts would remain significant and unavoidable (Class I), even after incorporation of available and feasible mitigation measures.

- Large Spills at Marine Terminal during Transfer Operations. Even though the chance of an oil spill is low, if an accidental spill occurs, unavoidable significant impacts can result. The annual probability of a spill larger than 1,000 gallons from the Shell Terminal is 1.2 percent, or one spill every 80 years. The probability of a spill greater than 42,000 gallons (1,000 bbls) during the 30-year lease period is 30 percent. Shell is compliant with USCG regulations for spill response for responding to a small (50 bbls) spill and impacts are less than significant (Class III). However the effects of a small spill may still result in a significant adverse impact as identified in other resources sections (water quality, biology, fisheries sections) of this Draft EIR. The consequences of a spill would depend on the size of the spill, the effectiveness of the response effort, and the biological, commercial fisheries,

shoreline and other resources impacted by the spill. Moderate spills of 1,000 gallons could have, and large spills of 1,000 bbl most likely would result in a significant adverse impact (Class I) that would have residual effects after first response mitigation efforts.

- Large Spills from Vessels in Transit. The potential for a spill from the Shell Terminal, including the tank vessel while it is at the Terminal, was found to be much greater than the potential of a spill from a tank vessel transiting within the Bay. However, while the probability of a large spill from vessels in transit is small, the consequences of such a spill would be a significant adverse (Class I) impact.
- Spills of Group V Oils. Group V oils have a specific gravity great than 1, and will not float on the water; instead they will sink below the surface into the water column or possibly to the bottom. OSPR regulations stipulate that all facilities that transfer Group V oil must identify equipment that can be used to monitor and/or recover Group V oil. Shell does not address Group V oils or identify equipment that can be used to respond to Group V spills in their Oil Spill Response Manual. Mitigation is provided that will require Shell to update their Oil Spill Response Plan, and to monitor the research conducted to respond to Group V releases and to improve their response capability as new techniques and equipment become available. Even so, it is difficult to monitor and predict the movement of Group V oils and to recover the oil while it is in the water. A Group V oil spill would be considered to be a significant adverse (Class I) impact.
- Spills from Pipelines during Non-Transfer Periods. Even though Shell has an extensive pipeline inspection program in place, should spills greater than 50 bbls occur, impacts may be significant (Class I).
- Discharge of Segregated Ballast Water and Introduction of Non-indigenous Species in Segregated Ballast Water. Invasive organisms/introduction of non-indigenous species in segregated ballast water released in the Bay could have significant (Class I) impacts to plankton, benthos, fishes, and birds. The discharge of segregated ballast water that contains harmful microorganisms could impair several of the proposed Project area's beneficial uses, including commercial and sport fishing, estuarine, habitat, fish migration, preservation of rare and endangered species, water contact recreation, non-contact water recreation, fish spawning, and wildlife habitat. Even with adherence to the provisions in the California Marine Invasive Species Control Act and CSLC reporting requirements, until a feasible system to kill organisms in ballast water is developed, the discharge of ballast water to San Francisco Bay will remain a significant adverse (Class I) impact.
- Marine Anti-Fouling Paints. Marine anti-fouling paints are used to reduce nuisance algal and marine growth on ships. Anti-fouling paints are biocides that contain copper, sodium, zinc, and TBT as the active ingredients. All of these are meant to be toxic to marine life that would settle or attach to the hulls of ships. Because of the high toxicity of organotins to marine organisms, the use of these substances on

vessels associated with the Shell Terminal is considered to be a significant adverse impact to water quality that cannot be mitigated to less than significant (Class I). Until all TBT is phased out by 2008, vessels with old applications of TBT on their hulls will visit the Shell Terminal. Although it is reasonable for Shell to require vessels to document no new TBT applications (per IMO mandate), Shell cannot feasibly require vessels to remove TBT from their hulls until the IMO mandate prohibiting the presence of TBT on shiphulls comes into effect in 2008. Therefore, until all TBT is gone from vessels using the Shell Terminal, impacts of organotins will remain significant (Class I).

- Spill Effects on Water Quality. The severity of impact from larger leaks or spills at the Shell Terminal that cannot be easily contained will depend on: (1) spill size, (2) oil composition, (3) spill characteristics (instantaneous vs. prolonged discharge), (4) the effect of environmental conditions on spill properties due to weathering, and (5) the effectiveness of cleanup operations. In the event of an oil spill, the initial impacts will be to the quality of surface waters and the water column, followed by potential impacts to sedimentary and shoreline environments. Following an oil spill, hydrocarbon fractions will be partitioned into different regimes and each fraction will have a potential to affect on water quality. Large spills at the Shell Terminal have the potential to result in significant adverse (Class I) impacts on water quality. Also, most tanker spills/accidents and larger spills that cannot be quickly contained either in the Bay or along the outer coast would result in significant adverse (Class I) impacts.
- Spill Effects on Biological Resources. An oil spill of 1,000 bbl or greater has the potential to have significant adverse impacts on biological resources (Class I). A spill between 50 and 1,000 bbl would also probably have significant biological impacts that might not be avoidable (Class I). Conclusions are based on relative sensitivity of the resource to oil, the vulnerability of the resource within San Francisco Bay, and the relative risk from a spill at the Shell Terminal or from a Tanker servicing the Shell Terminal.
- Spill Effects on Commercial Fisheries. Potentially significant (Class I) impacts may affect shrimp, herring fishing, herring spawning, and recreational fishing inside the Bay from an oil spill. Fishing activities would be further impacted by closures of piers for recreational fishing and marinas for both commercial and recreational fishing. Pier and marina closures and loss or damage to fisheries and fishing gear would increase the impacts on commercial fishing operations and angling activities. Along the outer coast, impacts would also have the potential to result in Class I impacts from a large spill event:
- Spill Effects on Shoreline and Recreation Amenities. Impacts resulting from larger oil releases at the Shell Terminal, in the Bay, or along the outer coast have the potential to degrade the environment and preclude the use of shoreline land and/or recreational activity at the site of the release and to the area extent of the spread of the oiling. The degree of impact, however, is influenced by many factors including, but not limited to, spill location, spill size, type of material spilled, prevailing wind and

current condition, the vulnerability and sensitivity of the resource, and response capability. Since it is impossible to predict with any certainty the potential consequences of spills, impacts are considered to be adverse and significant (Class I) severe spills could have residual effects that remain after first response cleanup occurs:

- Spill Effects on Visual Environment. The Shell Terminal in an area of rapidly moving current. If a spill is not detected immediately, the spread of a larger spill over a large portion of the Carquinez Strait could occur, and potentially impact shoreline areas on both sides of the strait. Oiling would result in a negative impression of the viewshed that has the potential to result in significant adverse (Class I) impacts if residual effects after first response containment and cleanup remain. Spills along the outer coast could result in significant (Class I) impacts, especially where spills would be visible in the nearshore zone or at the shoreline and where residual effects may remain after initial cleanup operations.

### **5.3 IRREVERSIBLE/IRRETRIEVABLE COMMITMENT OF RESOURCES**

As per CEQA (Section 15126[f]), this section presents the irreversible changes related to the use of, or long-term commitment of, nonrenewable resources. Irreversible changes represent long-term environmental damages that could result from the proposed Project are as follows:

- Of the impacts presented in Section 5.2, Significant Environmental Effects of Proposed Project that Cannot be Mitigated to Less than Significant, even the impacts of oil spills over a long enough time period are reversible. However, if a large spill would cause enough biological damage so as to result in the elimination of a species, an irreversible impact would result; and
- The Shell Terminal operation indirectly acts as a stimulus for the extraction of oil reserves, adding to the eventual depletion of a non-renewable resource.

### **5.4 GROWTH-INDUCING IMPACTS OF THE PROPOSED PROJECT**

The proposed Project involves a new lease for operation of the Shell Terminal. If granted, the new lease would allow Shell to continue to operate the Shell Terminal, which has operated at its current location, transferring and processing hydrocarbon fuels, lubricating oils and asphalt to the Shell Refinery, since 1915. The Shell Terminal operates on 19.26 acres of public land leased from the CSLC as a barge and tanker transfer facility for crude oil and petroleum products. The Shell Terminal is capable of operating 365-day, 24 hours a day, although actual operation depends on shipping demands. During the 30-year lease period, Shell would increase annual vessel calls from its current 196 annual average to 330 annual vessel calls (tankers and barges). Shell Terminal throughput would also increase. The increase in throughput would be similar to the quantity the Shell Terminal had handles in the 1980s and is allowed through their BAAQMD permit. No changes to the Shell Terminal wharf are proposed,

only reactivation of Berths #3 and #4. This increase in operations is market driven to keep up with the demands within the region. These demands are considered growth accommodating and not growth inducing, and would not directly or indirectly foster economic growth, populations growth, or the need for housing.

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